UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/531,267	04/13/2005	Thomas Lettner	R.304099	7818	
2119 RONALD E. C	2119 7590 08/23/2007 RONALD E. GREIGG			EXAMINER	
GREIGG & GREIGG P.L.L.C. 1423 POWHATAN STREET, UNIT ONE ALEXANDRIA, VA 22314			TRIEU, THERESA		
			ART UNIT	PAPER NUMBER	
			3748		
			MAIL DATE	DELIVERY MODE	
			08/23/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/531,267	LETTNER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Theresa Trieu	3748				
The MAILING DATE of this communication app						
Period for Reply		·				
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D. Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMN 36(a). In no event, however, will apply and will expire SIX (, cause the application to bec	MUNICATION. may a reply be timely filed by MONTHS from the mailing date of this communication. may a reply be timely filed				
Status						
1) Responsive to communication(s) filed on <u>13 April 2005</u> .						
Pa) This action is FINAL . 2b) ☑ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
 4) Claim(s) <u>9-25</u> is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) Claim(s) is/are allowed. 6) Claim(s) <u>9-25</u> is/are rejected. 		n.				
7) Claim(s) is/are rejected.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers	·					
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea 	s have been receive s have been receive rity documents have u (PCT Rule 17.2(a))	d. d in Application No been received in this National Stage				
* See the attached detailed Office action for a list Attachment(s)		s not received. rview Summary (PTO-413)				
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Pap	er No(s)/Mail Date				
 Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>April 13, 2005</u>. 	· —	ce of Informal Patent Application er:				

Art Unit: 3748

DETAILED ACTION

Receipt and entry of Applicants' Preliminary Amendment filed on April 13, 2005 is acknowledged.

Claims 1-8 have been canceled. Claims 9-25 have been added. Thus, claims 9-25 are pending in this application.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

- 3. The disclosure is objected to because of the following informalities: page 1, [0006] paragraph, line 3 is an incomplete sentence that should be deleted because it refers to claim number (claim 3) which can change in numbering and content.
- 4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

- Regarding claim 9, the use of alternative expression "radially and/or axially", "lightweight aluminum or an aluminum alloy" renders the claims indefinite because the alternative choices are non-equivalent.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 3748

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 9, 10, 13, 14, 16, 17, 19-21 and 23-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Kracht (Publication Number DE 8811252) in view of Yamada et al. (Yamada) (Patent Number 5,468,130).

Regarding claim 9, 13, 14, 16, 17, 19-21 and 23-25, Kracht discloses in an apparatus being a gear pump, having a housing (10, 20) and having at least one rotating component (40, 50) being a pumping element/gear wheel of the pump, disposed in the housing (10, 20), which component is radially and/or axially supported by bearing means in the housing, and at least one part (10, 20) of the housing at least partly forming the bearing means of the at least one component (40, 50), the improvement wherein the at least one housing part (10, 20), at least in the region of the bearing for the at least one component (16, 18), the housing part (10) has at least one bearing journal (80), on which the at least one component (40, 50) is radially supported; the housing part (10, 12) having a wall (60, 70), which is disposed at least approximately perpendicularly to the pivot axis (43, 53) of the at least one component (40, 50), and which forms an axial bearing of the at least one component (40, 50). However, Kracht fails to disclose the housing being made of lightweight aluminum having a coating of a nickel alloy.

Regarding claims 9, 10, 13, 14, 16, 17 and 19, Yamada teaches that it is conventional in the art to utilize the housing comprising lightweight aluminum and the surface of the one component being provided with a coating of a nickel alloy/ nickel-phosphorus alloy, which on its surface has an at least substantially plane microstructure (see col. 3, line 25-35). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have

Art Unit: 3748

lightweight aluminum and nickel coating on the surface of the gearwheel, the journal bearings and the wall of the housing part, as taught by Yamada in the Kracht apparatus, since the use thereof would have improved wear resistance and since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960)*.

7. Claims 11, 12, 15, 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kracht in view of Yamada as applied to claim 9 above, and further in view of legal precedent.

Regarding claims 11, 12, 15, 18 and 22, the modified Kracht discloses the invention as recited above; however, Kracht fails to disclose the coating being hardness-enhanced by tempering.

Regarding claims 11 and 12, a claim for an article capable of such definition must define the article by its structure and not by the process of making it. Since the claimed the coating on the surface of the gearwheel, the journal bearings and the wall of the housing parts is capable of structural definition, the patentability of the claims must be determined solely on the basis of recited structure, exclusive of process recitations. *In re Johnson, 394 f.2D 591, 157 USPQ 620, 55 CCPA 1463.* Applicants should also not that where a product by process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an obvious difference between the two. *See In re Marosi, 218 USPQ 289* (Fed.Cir. 1983). Accordingly, the coating

Art Unit: 3748

on the surface of the gearwheel, the journal bearings and the wall of the housing parts do not result in any different structure that shown by the applied prior art.

Prior Art

- 8. The IDS (PTO-1449) filed on April 13, 2005 has been considered. An initialized copy is attached hereto.
- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of four patents: Wood (U.S. Patent Number 3,077,840), Dworak (U.S. Patent Number 3,632,240), McBurnett et al. (U.S. Patent Number 4,266,915), and Kayaba (Publication Number GB 2077358), each further discloses a state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3748

67 Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT August 20, 2007 Theresa Trieu Primary Examiner Art Unit 3748